CLAIMS

1. A method of modulating angiogenesis comprising administering to a cell undergoing the angiogenic process an effective amount of stanniocalcin-1 (STC-1) or variant thereof.

2. The method of claim 1, wherein said cell is present in an in vitro culture.

3. The method of claim 1, wherein said cell is present in an ex vivo culture.

4. The method of claim 1, wherein said cell is present in vivo.

5. The method of claim 1, wherein said cell is an endothelial cell.

6. The method of claim 1, wherein migration or morphogenesis of the cell is substantially inhibited.

7. The method of claim 1, wherein the angiogenic process is associated with expression of hepatocyte growth factor in the cell undergoing the angiogenic process or a neighboring cell .

8. The method of claim 7, wherein expression of hepatocyte growth factor occurs prior to and/or parallels initiation of the angiogenic process.

9. The method of any of claims 1 to 8, wherein modulation by STC-1 can be inhibited by an antagonist of STC-1.

10. The method of claim 9, wherein said antagonist is an antibody or fragment thereof.

11. The method of claim 9, wherein said antagonist is a small molecule.

12. The method of claim 9, wherein said antagonist is a peptide.

13. A method of selectively inhibiting an angiogenic process promoted by a first angiogenic factor and but not the angiogenesis process promoted by a second angiogenic factor, comprising administering to a cell exposed to both factors an effective amount of STC-1 or a variant thereof, wherein the STC-1 or a variant thereof inhibits at least one step of the

angiogenic process promoted by the first angiogenic factor but not the second angiogenic factor.

14. The method of claim 13, wherein the first and second angiogenic factors both are capable of inducing endogenous expression of STC-1.

15. The method of claim 14, wherein the first angiogenic factor is hepatocyte growth factor.

16. The method of claim 14 or 15, wherein the second angiogenic factor is basic fibroblast growth factor.

17. The method of claim 13, wherein the first angiogenic factor is hepatocyte growth factor and the second angiogenic factor is vascular endothelial growth factor.

18. The method of any of claims 13-17, wherein the step inhibited by STC-1 or variant thereof is cell migration and/or morphogenesis induced by or associated with exposure of the cell to the first angiogenic factor.

19. The method of any of claims 13-18, wherein STC-1 or variant thereof does not substantially inhibit cell proliferation.

20. The method of any of claims 13-19, wherein STC-1 or variant thereof does not substantially inhibit cell migration and/or morphogenesis induced by or associated with exposure of the cell to the second angiogenic factor.

21. A polypeptide comprising an amino acid sequence of at least 80% identity to the sequence of human STC-1, wherein an effective amount said polypeptide substantially inhibits at least one, but not all, stages of multi-stage angiogenic process.

22. The polypeptide of claim 21, wherein the angiogenic process is induced by or associated with presence of hepatocyte growth factor.

23. The polypeptide of claim 21 or 22 the expression of which can be induced by IL-1b, bFGF, HGF, IL-6 and/or IL-4.

24. The polypeptide of claim 21, 22 or 23, wherein the polypeptide substantially inhibits endothelial cell migration and/or morphogenesis but does not substantially inhibit endothelial cell proliferation.

25. The polypeptide of any of claims 21-24 wherein said polypeptide does not substantially reduce c-met phosphorylation.

26. A method of substantially inhibiting vascularization in a mammal, comprising administering to the mammal an effective amount of STC-1 or variant thereof.

27. The method of claim 26 wherein said vascularization is induced by or associated with presence of hepatocyte growth factor.

28. A method of promoting vascularization in a mammal, comprising administering to the mammal an effective amount of an antagonist of STC-1 or variant thereof.

29. The method of claim 28 wherein said vascularization is induced by or associated with presence of hepatocyte growth factor.